west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Phone: (304) 926-0475 • Fax: (304) 926-0479

Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	G10-D166 After-the-Fact
Plant ID No.:	081-00012
Applicant:	Pocahontas Coal Company, LLC
Facility Name:	East Gulf Preparation Plant
Location:	Rhodell, Raleigh County, WV
SIC Codes:	1221 (Bituminous Coal & Lignite - Surface)
NAICS Codes:	212111 (Bituminous Coal and Lignite Surface Mining)
Application Type:	Modification
Received Date:	October 7, 2016
Engineer Assigned:	Dan Roberts
Fee Amount:	$1,500
Date Received:	October 12, 2016
Applicant's Ad Date:	October 19, 2016
Newspaper:	*The Register-Herald*
Complete Date:	February 10, 2017
UTM Coordinates:	Easting: 474.81163 km • Northing: 4164.408.19 km • NAD83 Zone 17N
Lat/Lon Coordinates:	Latitude: 37.611609 • Longitude: -81.307556 • NAD83
Description:	After-the-Fact modification to do the following: convert from a Rule 13 individual permit to a General Permit G10-D registration; equipment identifications, controls, transfer points and material flow have been modified and renumbered; remove and delete RCC5 through RCC10, CC1 through CC3, CC1A, CC6, CB1 and RB1, which were previously permitted, but never constructed; add OS-01, SS-01, CR-01, CR-02, BC-07, BC-08, BC-10, BS-04, BS-05 and BS-06,which are existing but have never been in the equipment table or permit before; modify SS-02, BS-03, BC-03 through BC-06, OS-02, BC-09 and BC-11 through BC-16 by increasing the maximum hourly and annual throughput rates.

BACKGROUND

Pocahontas Coal Company, LLC is currently operating their existing East Gulf Preparation Plant under permit R13-2484C, which was approved on February 8, 2011. Pocahontas Coal Company, LLC is the owner/operator of the site.

At one time, the East Gulf Preparation Plant operated a thermal dryer at this site, but it has since been shut down and removed from service. John Moneypenny's inspection notes from 3/13/12: "The thermal dryer has been out of service for many years now and is not needed due to the efficiency of the mechanical separators. With this, the Company requested in late 2011 that the Title V Operating Permit be removed from Active Status to reflect the current operating scenario. R13-2484C reflects the plant's current operations. No major problems found. Water truck logsheets were not available from late 2010 to present.....I told the plant foreman, Sam Godbey, to start using the forms again."

In the cover letter dated March 13, 2011 for Pocahontas Coal Company, LLC's East Gulf Preparation Plant 2011 Title V Compliance Certification & 2nd Half Semi-annual Monitoring Report, the third paragraph reads "Pocahontas Coal Company, LLC requested and was granted an inactive status for East Gulf Preparation Plant's Title V on November 14, 2011."

On March 27, 2017 during a phone call with the company's consultant, Ms. Donna Toler stated that the thermal dryer had been de-energized, parts had been removed and the company was taking bids to completely dismantle it.

HISTORY OF CHANGES AT THE FACILITY

1972 Added the coal fine circuit to the preparation plant's wet circuit. This included Heavy Media Cyclones and Froth Flotation circuits. Installed a Heyl & Patterson #80 Thermal Dryer (original design values 220 - 370 TPH as received - wet basis, with a 22 - 29 TPH evaporative load capacity).

1978 Additional truck Dump, Rotary Breaker, Raw Coal Storage Silo, Refuse Storage Bin, and Raw Coal Conveyors 1-3 and #5 were added to Preparation plant.

1982 Preparation Plant's Scalping Screen retired from service (in place). Installed Raw Coal Wet Circuit Screens and additional heavy media cyclones. Modified the Thermal Dryer's I.D. fan by increasing wheel diameter from 85" to 88" in order to increase the venturi pressure differential of the Scrubber (control device efficiency increase to meet emissions standards).

1983 Changed the I.D. Fan Wheel again, from 88" to 89", which in turned resulted in a change of the BHP requirements that resulted in the need for a larger drive motor. This was resolved by the installation of twin drive 1000 HP motors. This was done to increase the venturi pressure differential of the Scrubber (control device efficiency increase to meet emissions standards). The Clean Coal Stockpile and associated Clean Coal Conveyors No. 4,5, and

No.6 were added to the original plant configuration.

1980's There were resident complaints when the previous owner installed a conveyor system and stockpile for the thermally dried coal. The new owner installed a stacking tube. (Since 1992 to present there have not been any resident complaints.)

1985 Preparation Plant's Wet Circuit modified for the addition of 14" classifying cyclones and Sieve Bends.

1986 Refuse system conveyors no 1-8 were added to the original plant configuration. This allowed the direct placement of refuse to the refuse disposal area.

1987 Preparation Plant's Wet Circuit modified for additional Sieve Bends and the addition of the EB-36 centrifuge dryer. The EB-36 dryer reduced the moisture content of the clean coal fines going to the Thermal Dryer from the Initial Design value of 12.8% downward to 10.97%. The end product resultant from the dryer was also changed from 3.5% to 6.5% moisture which in-turn reduced the required specific heat input of the Thermal Dryer furnace (required less fuel for same process, or would allow an slight increase in production feed capacity ~300 TPH for the same design heat input). The Thermal Dryer's I.D. fan changes caused the stack velocity to increase to ~4200 fpm (beyond normal range of ~3000 fpm). This caused some moisture particle carry over impacting the stack test results.

1990 WVAPCC cited Maben Energy for modifications made to thermal dryer causing it to be subject to NSPS standards. The stack carry over problem was corrected by increasing the stack diameter from 68" to 90" and increasing the length from 50' to 95' to reestablish normal operating parameters, along with straightening vanes to help correct the cyclonic flow pattern in stack.

1992 Added additional instrumentation to Thermal Dryer in order to comply with NSPS standards. Conducted Stack Test to show compliance. Particulate emissions were measure to be 0.021 gr/dscf as compared to the 0.031 gr/dscf emission limit.

2001 Re-configured the physical location of refuse conveyors RC6, RC7 and RC14 to allow better distribution of refuse to the disposal area.

2001 A consent order was written for the company to perform a stack test and submit permit applications.

2002 Modification application R13-2484 approved September 9, 2002 for the removal of scalping screen SSC-1 and the addition of six refuse conveyors (RC8 thru RC13) and raw coal rotary dumper RRCD and associated conveyor RCC6.

2005 Class I administrative update application R13-2484 approved October 12, 2005 to change permit condition A.3 as follows: temperature of gas stream at the exit of the thermal dryer from 1400 °F to 1464 °F; pressure loss through the scrubber from 28 inches of water to 23 inches of water; and water supply pressure from 7.0 psig to 7.8 psig.

2007 After-the-Fact modification application R13-2484B was approved June 5, 2007 to increase the storage capacity of CCOS1 from 50,000 tons to 150,000 tons and add haulroad UPHR3 (5 miles round trip) from adjacent mine to RCTD1. Application stated it was an after-the-fact and the changes had already been made in 2003.

2007 The thermal dryer was shut down in October of 2007. The thermal dryer was replaced by 2 water decanters enclosed in the wet wash plant and can meet the customer's requirement of 8% moisture. There are no plans to ever restart the dryer and the Company may have the T5 permit voluntarily closed in the future.

2011 After-the-Fact modification permit R13-2484C was approved on February 8, 2011 to do the following: add four new raw coal conveyors (RCC7, RCC8, RCC9, and RCC10) rated at 1,800 TPH and 5,300,000 TPY from an adjacent mine; remove the current requirement for fixed water sprays (75% control efficiency) along the haulroad and replace with a water truck applying water and a chemical suppressant (85% control efficiency); increase the round trip length of haulroad UPHR2 from 0.26 miles to 0.41 miles (after-the-fact); and delete haulroad UPHR3 from the Tommy Creek Mine because it is no longer being used. For conveyors RCC1 and CC1A, the control device was changed from PE to FE to correct a previous typographical error. Convert permit to the new boilerplate format. Develop an up-to-date comprehensive emissions unit table.

2016 Modification application to do the following: convert from a Rule 13 individual permit to a General Permit G10-D registration; equipment identifications, controls, transfer points and material flow have been modified and renumbered; remove and delete RCC5 through RCC10, CC1 through CC3, CC1A, CC6, CB1 and RB1, which were previously permitted, but never constructed; add OS-01, SS-01, CR-01, CR-02, BC-07, BC-08, BC-10, BS-04, BS-05 and BS-06,which are existing but have never been in the equipment table or permit before; modify SS-02, BS-03, BC-03 through BC-06, OS-02, BC-09 and BC-11 through BC-16 with increased throughput rates.

DESCRIPTION OF PROCESS (taken directly from the application)

The East Gulf Preparation Plant facility is located in a very remote area near Rhodell in Raleigh County, WV. The facility is currently idle and proposed changes for de-energizing the thermal dryer and removal of the thermal dryer feed and reclaim conveyors will take place prior to restarting the plant. With changes in the controls and deletion of the thermal dryer system, this facility is eligible for the General Permit Program.

This application proposes changes in equipment identification, existing and proposed controls, material flow, and existing equipment, asa well as the deletion of the railcar dump and deep mine conveyor systems.

The preparation plant facility will be fed by one truck dump bin area and one front-end loader fed bin area. Raw coal will be delivered by truck to the raw coal stockpile area OS-01(SW-WS); fed

to bin BS-01(PW) by front-end loader; discharge to a fully enclosed w/water screen SS-01(FW); be processed by a fully enclosed w/water breaker CR-01(FW); before being sent to the plant on a fully enclosed belt conveyor BC-01(FE) @ TP-01(UL-MDH) thru TP-07(TC-FW).

Raw coal will also be received at the three-sided roofed truck dump bin BS-02(PW); be processed by breaker CR-02(FW); discharge to belt BC-02(PE); further processed by a secondary double roll crusher CR-03(FW); before being sent to the plant via a fully enclosed belt conveyor BC-03(FE) @ TP-08(UD-PW) thru TP-13(TC-FW). Raw coal will be processed by screen SS-02(FW) inside the plant @ TP-14(TC-FW); sent to the 5,500 ton raw coal silo BS-03(FE) @ TP-15(TC-FW) via belt conveyor BC-04(FE) @ TP-16(TC-FE); reclaimed to the plant via belt conveyor BC-05(FE) @ TP-17(TC-FE) and TP-18(TC-FW).

Clean coal from the plant will be delivered to clean coal stockpile area OS-02(SW-WS) via two partially enclosed belt conveyors BC-06(PE) and BC-07(PE) @ TP-19(TC-FW) thru TP-21(TC-MDH). Belt conveyor BC-06 can also discharge via flop gate to belt conveyor BC-08(PE) which can send plant clean coal directly to the loadout via stockpile reclaim belt conveyor BC-09(PE). Stockpile OS-02 will reclaim under-pile to belt conveyor BC-09(PE); transfer to the loadout belt conveyor BC-10(FE); feed the rail surge and weigh bin BS-04(FE), BS-05(FE); and discharge to railcar via telescopic chute for delivery @ TP-22(TC-FE) thru TP-28(LR-TC).

Refuse will be delivered from the plant to the refuse bin BS-06(FE) via a series of partially enclosed belt conveyors BC-11(PE) thru BC-16(PE) @ TP-29(TC-FW) thru TP-35(TC-FE). The material will be loaded out to truck for delivery to the disposal area @ TP-36(LO-MDH) and TP-37(UL-MDH).

The facility shall be modified and operated in accordance with the following equipment and control device information taken from general permit registration application G10-D166 and any amendments thereto:

Equip-ment ID No.	Date of Construction, Reconstruction or Modification [1]	G10-D Applicable Sections [2]	Description	Maximum Capacity		Control Device [2]	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID. No.	Control Device[3]
Trucked Raw Coal Circuits									
OS-01	C 2016	5 and 8	Raw Coal Stockpile - maximum 50,000 tons capacity, 88,869 ft² base area and 75' height - receives clean coal from trucks, stores it and then it is reclaimed by a front endloader to BS-01	600	5,256,000	WS	B A	TP-01 TP-02	UL-MDH UD-PW
BS-01	M 2010 C 1978	5 and 8	Front-end Loader Dump Bin - 200 tons capacity - receives raw coal from OS-01 via front-end loaders and feeds it onto SS-01	600	5,256,000	PW	B A	TP-02 TP-03	UD-PW TC-FW
SS-01	C 1978	5 and 6	Vibrating Screen - receives raw coal from BS-01, sizes it to 4"x0 and drops the sized raw coal onto BC-01 and the oversized raw coal into CR-01	600	5,256,000	FW	B A A	TP-03 TP-04 TP-05	TC-FW TC-FW TC-FW
CR-01	C 1978	5 and 6	Breaker - receives oversized raw coal from SS-01, crushes it to 4"x0 and drops the crushed raw coal onto BC-01	600	5,256,000	FW	B A	TP-05 TP-06	TC-FW TC-FW

Equip-ment ID No.	Date of Construction, Reconstruction or Modification [1]	G10-D Applicable Sections [2]	Description	Maximum Capacity		Control Device [2]	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID. No.	Control Device[3]
BC-01	C 1978	5 and 6	Belt Conveyor - receives screened raw coal from SS-01 and crushed raw coal from CR-01 and transfers it onto SS-02 (see below) inside the wet wash prep plant building	600	5,256,000	PE	B B A	TP-04 TP-06 TP-07	TC-FW TC-FW TC-FW
BS-02	C 2011	5 and 8	Truck Dump Bin - 100 tons capacity - receives raw coal from trucks and feeds it into CR-02	600	5,256,000	PW	B A	TP-08 TP-09	UD-PW TC-FW
CR-02	C 2011	5 and 8	Breaker - receives raw coal from BS-02, crushes it to 4"x0 and drops the crushed raw coal onto BC-02	600	5,256,000	FW	B A	TP-09 TP-10	TC-FW TC-FW
BC-02	C 2011	5 and 8	Belt Conveyor - receives crushed raw coal from CR-02 and transfers it into CR-03	600	5,256,000	PE	B A	TP-10 TP-11	TC-FW TC-FW
CR-03	C 2011	5 and 8	Double Roll Crusher - receives crushed 4"x0 raw coal from BC-02, crushes it to +2" and drops the crushed raw coal onto BC-03	600	5,256,000	FW	B A	TP-11 TP-12	TC-FW TC-FW
BC-03	M 2016 C 2011	5 and 8	Belt Conveyor - receives crushed raw coal from CR-03 and transfers it onto SS-02 inside the wet wash prep plant building	600	5,256,000	FE	B A	TP-12 TP-13	TC-FW TC-FW
SS-02	M 2016 C 1978	5 and 8	Double Deck Screen - receives raw coal from BC-01 and BC-03, sizes it to +4"x0 and oversize material drops onto BC-11 (see Refuse Circuit below) while the screened raw coal drops onto BC-04	1,200	10,512,000	FW	B B A A	TP-07 TP-13 TP-14 TP-15	TC-FW TC-FW TC-FW TC-FW
BC-04	M 2016 C 1978	5 and 8	Belt Conveyor - receives screened raw coal from SS-02 and transfers it into BS-03	1,200	10,512,000	FE	B A	TP-15 TP-16	TC-FW TC-FE
BS-03	M 2016 C 1978	5 and 8	Raw Coal Silo - 5,500 tons capacity - receives screened raw coal from BC-04, stores it and then feeders reclaim it onto BC-05	1,200	10,512,000	FE	B A	TP-16 TP-17	TC-FE TC-FE
BC-05	M 2016 C 1978	5 and 8	Belt Conveyor - receives screened raw coal from BS-03 and transfers it into the wet wash circuit inside the preparation plant	1,200	10,512,000	FE	B A	TP-17 TP-18	TC-FE TC-FW
Clean Coal Circuit									
BC-06	M 2016 C 1986	5 and 8	Belt Conveyor - receives clean coal from the wet wash circuit and transfers it onto BC-07 or via a flop gate onto BC-08	800	7,008,000	PE	B A A	TP-19 TP-20 TP-22	TC-FW TC-FE TC-FE
BC-08	M 2016 C 1986	5 and 8	Belt Conveyor - receives clean coal from BC-06 and transfers it directly over onto BC-09 (see below)	800	7,008,000	PE	B A	TP-22 TP-23	TC-FE TC-FE
BC-07	M 2016 C 1986	5 and 8	Belt Conveyor - receives clean coal from BC-06 and transfers it onto OS-02	800	7,008,000	PE	B A	TP-20 TP-21	TC-FE TC-MDH
OS-02	M 2016 M 2003 or 2007 C 1986	5 and 8	Clean Coal Stockpile - maximum 150,000 tons capacity, 288,869 ft^2 base area and 75' height - receives clean coal from BC-07, stores it and then it is reclaimed by underground feeders onto BC-09	800 in 3,500 out	7,008,000	WS	B A	TP-21 TP-24	TC-MDH LO-UC
BC-09	M 2016 C 1986	5 and 8	Belt Conveyor - receives clean coal from BC-08 and OS-02 and transfers it into the prep plant building and onto BC-10	3,500	7,008,000	PE	B B A	TP-23 TP-24 TP-25	TC-FE LO-UC TC-FE
Railcar Loadout Circuit									
BC-10	C 2010	5 and 8	Belt Conveyor - receives clean coal from BC-09 and transfers it into BS-04	3,500	7,008,000	FE	B A	TP-25 TP-26	TC-FE TC-FE
BS-04	C 2010	5 and 8	Surge Bin - 400 tons capacity - receives clean coal from BC-10 and feeds it into BS-05	3,500	7,008,000	FE	B A	TP-26 TP-27	TC-FE TC-FE
BS-05	C 2010	5 and 8	Weigh Bin - 220 tons capacity - receives clean coal from BS-04 and loads it into railcars through a telescopic chute	3,500	7,008,000	FE	B A	TP-27 TP-28	TC-FE LR-TC

Equip-ment ID No.	Date of Construction, Reconstruction or Modification [1]	G10-D Applicable Sections [2]	Description	Maximum Capacity		Control Device [2]	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID. No.	Control Device[3]
Refuse Circuit									
BC-11	M 2016 C 1986	5 and 8	Belt Conveyor - receives oversize material from SS-02 and refuse from the wet wash circuit and transfers it to BC-12	600	5,256,000	PE	B B A	TP-14 TP-29 TP-30	TC-FW TC-FW TC-FE
BC-12	M 2016 C 1986	5 and 8	Belt Conveyor - receives refuse from BC-11 and transfers it to BC-13	600	5,256,000	PE	B A	TP-30 TP-31	TC-FE TC-FE
BC-13	M 2016 C 1986	5 and 8	Belt Conveyor - receives refuse from BC-12 and transfers it to BC-14	600	5,256,000	PE	B A	TP-31 TP-32	TC-FE TC-FE
BC-14	M 2016 C 1986	5 and 8	Belt Conveyor - receives refuse from BC-13 and transfers it to BC-15	600	5,256,000	PE	B A	TP-32 TP-33	TC-FE TC-FE
BC-15	M 2016 C 2001	5 and 8	Belt Conveyor - receives refuse from BC-14 and transfers it to BC-16	600	5,256,000	PE	B A	TP-33 TP-34	TC-FE TC-FE
BC-16	M 2016 C 2001	5 and 8	Belt Conveyor - receives refuse from BC-15 and transfers it to BS-06	600	5,256,000	PE	B A	TP-34 TP-35	TC-FE TC-FE
BS-06	M 2016	5 and 8	Refuse Truck Loadout Bin - 400 tons capacity - receives refuse from BC-16, stores it and then loads it into trucks for transport to the refuse disposal area	600	5,256,000	FE	B A A	TP-35 TP-36 TP-37	TC-FE LO-MDH UL-MDH

1 In accordance with 40 CFR 60 Subpart Y, coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified on or before April 28, 2008 shall not discharge gases which exhibit 20 percent opacity or greater. Coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified after April 28, 2008 shall not discharge gases which exhibit 10 percent opacity or greater. For open storage piles constructed, reconstructed, or modified after May 27, 2009, the permittee shall prepare and operate in accordance with a fugitive coal dust emissions control plan that is appropriate for site conditions.

2 All registered affected facilities under Class II General Permit G10-D are subject to Sections 1.0, 1.1, 2.0, 3.0 and 4.0.

3 Control Device Abbreviations: FE - Full Enclosure; FW - Full Enclosure with Water Sprays; PE - Partial Enclosure; PW - Partial Enclosure with Water Sprays; WS - Water Sprays; TC - Telescopic Chute; MDH - Minimize Drop Height; and N - No Control.

DESCRIPTION OF FUGITIVE EMISSIONS (taken directly from the application)

Potential sources of fugitive emissions for this facility include emissions, which are not captured by pollution control equipment and emissions from open stockpiles and vehicular traffic on unpaved haulroads and work areas. The hauroads and work areas will be controlled by water truck in accordance with section E.6.c.i. of the General Permit.

The water truck is equipped with pumps sufficient to maintain haulroads and work areas. The water truck will be operated three times daily, and more as needed in dry periods.

An additive to prevent freezing will be utilized in the winter months when freezing conditions are present.

SITE INSPECTION

On April 14, 2015, John Moneypenny of the DAQ's Compliance and Enforcement Section performed a scheduled full on-site targeted inspection. Mr. Moneypenny's notes were as follows: "Prep plant was shut down...entrances blocked with concrete barriers....no guards around." At the

time of the inspection, the facility was found to not be in operation and was given a status code of 41 - Temporarily Shut Down.

Directions from Charleston, WV, are to take I-64 East/I-77 South to Beckley, take Exit 42 and take State Route 16 South past Sophia and then Helen, turn left onto County Route 33 (Coal City Road) and travel approximately 3.4 miles and the plant entrance will be on the right. The facility is located on County Route 33 (Coal City Road) past Rhodell and Eastgulf, but before Killarney.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Fugitive emission calculations for continuous and batch drop operations, transfer points, crushing and screening, storage piles, and paved and unpaved haulroads are based on AP-42 Fifth Edition "Compilation of Air Pollution Emission Factors", Volume 1. Control efficiencies were applied based on "Calculation of Particulate Matter Emission - Coal Preparation Plants and Material Handling Operations." The emission factors for crushing/breaking and screening operations were obtained from the Air Pollution Engineering Manual - Air & Waste Management Association - June 1992. The facility-wide emissions calculations were performed by the applicant's consultant using the DAQ's G10-C Excel Emission Calculation Spreadsheet and were checked for accuracy and completeness by the writer.

The proposed modification will result in a new potential to discharge controlled particulate matter emissions of 133.87 pounds per hour (lb/hour) and 580.14 tons per year (TPY) of particulate matter (PM), of which 44.20 lb/hour and 190.36 TPY will be particulate matter less than 10 microns in diameter (PM_{10}). Refer to the following table for a complete summary of the facility's proposed potential to discharge:

- New Facility-wide Emissions Total - **Pocahontas Coal Company, LLC East Gulf Preparation Plant**	**Controlled PM Emissions**		**Controlled PM_{10} Emissions**	
	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions				
Open Storage Pile Emissions	0.42	1.84	0.20	0.86
Unpaved Haulroad Emissions	103.50	455.02	29.91	131.50
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	*103.92*	*456.85*	*30.11*	*132.37*
Point Source Emissions				
Equipment Emissions	24.00	105.12	11.28	49.41
Transfer Point Emissions	5.95	18.17	2.81	8.59
Point Source Emissions Total (PTE)	*29.95*	*123.29*	*14.09*	*58.00*
FACILITY EMISSIONS TOTAL	**133.87**	**580.14**	**44.20**	**190.36**

REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the modified facility. The proposed modification of Pocahontas Coal Company, LLC's existing wet wash coal preparation plant is subject to the following state and federal rules:

45CSR5 *To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Wet wash coal preparation plants and Coal Refuse Disposal Areas*

The facility is subject to the requirements of 45CSR5 because it meets the definition of "Coal Preparation Plant" found in subsection 45CSR5.2.4. The facility should be in compliance with Section 3 (less than 20% opacity) and Section 6 (fugitive dust control system and dust control of the premises and access roads) when the particulate matter control methods and devices proposed are in operation.

45CSR13 *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation*

The proposed modification is subject to the requirements of 45CSR13 because it will involve the inclusion of existing equipment and open storage piles which have not been permitted before and the modification of existing equipment and open storage piles, which are defined as affected facilities in 40 CFR 60 Subpart Y. The applicant has submitted an application for a registration to modify. The applicant published a Class I legal advertisement in *The Register-Herald* on October 19, 2016 and submitted the $500 application fee and $1,000 application fee.

45CSR16 *Standards of Performance for New Stationary Sources*
40 CFR 60 *Subpart Y: Standards of Performance for Coal Preparation and Processing Plants*

This facility is subject to 40 CFR 60 Subpart Y because it was modified after October 24, 1974 and processes more than 200 tons of coal per day. The proposed modification includes the inclusion of existing equipment and open storage piles which have not been permitted before and the modification of existing equipment and open storage piles, which are defined as affected facilities in 40 CFR 60 Subpart Y. Therefore, the proposed modification is subject to 45CSR16, which incorporates by reference 40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation Plants. The facility should be in compliance with Section 254(b) (less than 10% opacity for coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal which was constructed, re-constructed or modified after April 28, 2008) when the particulate matter control methods and devices proposed are in operation.

The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site

conditions. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile. The plan must be submitted to the Director prior to startup of the new, reconstructed or modified open storage pile.

45CSR30 Requirements for Operating Permits

In accordance with 45CSR30 Major Source Determination, the facility is *not* listed in 45CSR30 subsection 2.26.b as one of the categories of stationary sources which must include fugitive emissions (open storage piles constructed or modified on or before May 27, 2009 and haulroads) when determining whether it is a major stationary source for the purposes of § 302(j) of the Clean Air Act. The facility's potential to emit will be 58.86 TPY for PM_{10} (open storage piles constructed or modified after May 27, 2009 and point sources combined), which is less than the 45CSR30 threshold of 100 TPY of a regulated air pollutant used to define a major stationary source. Therefore, the facility remains a nonmajor source subject to 45CSR30. The facility is not subject to the permitting requirements of 45CSR30 and is classified as a deferred source.

The proposed modification of Pocahontas Coal Company, LLC's existing wet wash coal preparation plant is <u>not</u> subject to the following state and federal rules:

45CSR14 Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration

In accordance with 45CSR14 Major Source Determination, the facility is *not* one of the 100 TPY stationary sources listed under the definition of "Major Stationary Source" in subsection 2.43.a. Therefore, it must have the potential to emit 250 TPY or more of any regulated pollutant to meet the definition of a major source in subsection 2.43.b. At the end of subsection 2.4.3, this facility is not listed in Table 1 - Source Categories Which Must Include Fugitive Emissions. So, fugitive emissions (from open storage piles constructed or modified on or before May 27, 2009 and haulroads) are not included when determining major stationary source applicability. The facility's potential to emit will be 125.13 TPY for PM (open storage piles constructed or modified after May 27, 2009 and point sources combined), which is less than the 45CSR14 threshold of 250 TPY for a regulated air pollutant used to define a major stationary source. Therefore, the proposed modification is not subject to the requirements set forth within 45CSR14.

<u>TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS</u>

A toxicity analysis was not performed because the primary pollutants that will be emitted from this facility are PM (particulate matter) and PM_{10} (particulate matter less than 10 microns in diameter), which are non-toxic pollutants.

AIR QUALITY IMPACT ANALYSIS

Air dispersion modeling was not performed due to the size and location of this facility and the extent of the proposed modification. This facility is located in Raleigh County, WV, which is currently in attainment for PM (particulate matter) and PM_{10} (particulate matter less than 10 microns in diameter). This modified facility will remain a minor source as defined by 45CSR14 and 45CSR19, therefore, an air quality impact analysis is not required.

GENERAL PERMIT ELIGIBILITY

The proposed modification of this facility meets the applicability criteria (Section 2.3), siting criteria (Section 3.1) and limitations and standards (Section 5.1) as specified in General Permit G10-D.

All registered facilities under Class II General Permit G10-D are subject to Sections 1.0, 1.1, 2.0, 3.0 and 4.0.

MONITORING OF OPERATIONS

The coal processing and conveying equipment and storage areas should be observed to make sure that the facility is meeting the applicable visible emission standards of 40 CFR 60, Subpart Y. Visible emissions from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, re-constructed or modified after April 28, 2008 shall not exceed 10 percent (10%) opacity as stated in 40 CFR 60.254(b). Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the maximum 10% opacity limitation.

The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile. The plan must be submitted to the Director prior to startup of the new, reconstructed or modified open storage pile.

RECOMMENDATION TO DIRECTOR

The information contained in this modification application indicates that compliance with all applicable regulations should be achieved when all of the proposed particulate matter control methods are in operation. Due to the location, nature of the process, and control methods proposed, adverse impacts on the surrounding area should be minimized. No comments were received during the comment period. Therefore, the granting of a General Permit G10-D registration to Pocahontas

Coal Company, LLC for the modification of their existing wet wash coal preparation plant located near Rhodell, Raleigh County, WV is hereby recommended.

Daniel P. Roberts, Engineer Trainee
NSR Permitting Section

April 12, 2017
Date